

ABSTRACT OF THE DISCLOSURE

APPARATUS FOR ISOLATION OF PAYLOADS  
WITH LOW TRANSMISSIBILITY

5 A payload isolation system for isolating a payload from  
a base structure upon which the payload is supported. The  
payload isolation system includes: a motion constraint for  
maintaining a parallel relationship between the payload and the  
base structure; and a support for providing vertical and/or  
lateral support of the payload relative to the base structure  
such that the transmission of vertical and/or lateral vibration  
between the payload and the base structure are suppressed. The  
support means preferably exhibits nonlinear elastic  
10 characteristics in response to an effective weight of the  
payload. The non-linear elastic characteristics preferably  
include a substantially rigid characteristic at low and high  
levels of deformation and a compliant characteristic at  
intermediate levels of deformation. In yet another preferred  
15 implementation, the motion constraint means are mechanical  
linkages.